

PART FOR SUPPORTING AND FIXING AN ELECTRICAL OR
ELECTRONIC COMPONENT

5 The invention relates to a part for supporting and fixing an electrical or electronic component, and more particularly to a part of this kind comprising a compartment for supporting the electrical or electronic component, two claws which are each in engagement and in
10 electrical continuity with a pin on the electrical or electronic component disposed in the supporting compartment between the two claws, and a detachable closing cover.

A part of this type is especially known from document
15 US 5 076 801. According to this disclosure, at least two distinct electric wires are each in engagement and in electrical continuity with each of the claws and the detachable closing cover is designed to hold each electric wire in position on each claw. As a result of this
20 arrangement, connection of the electrical component in series with just one single electric wire necessitates prior severing into two distinct electric strands.

Parts for supporting and fixing an electrical component
25 that necessitate prior severing of just one single electric wire into two distinct electric strands for connecting the electrical component in series are also known from documents FR 2 306 597 and GB 762 640.

30 The object of the invention is to modify a part for supporting and fixing an electrical or electronic component, which part is known in the prior art, in such a way as to permit the connection of the electrical component in series with an electric wire without prior severing of
35 the said electric wire.

To that end, the subject of the invention is a part for supporting and fixing an electrical or electronic component, which part comprises a compartment for supporting the electrical or electronic component, two claws which are each in engagement and in electrical continuity with a pin on the electrical or electronic component disposed in the supporting compartment between the two claws, and a detachable closing cover, characterised in that a blade is fixed to the detachable closing cover so as to sever an electric wire which is in engagement and in electrical continuity with the two claws in such a way as to connect the electrical or electronic component in series with the electric wire.

As a result of this arrangement, the electrical or electronic component is connected in series with the electric wire without prior severing of the latter. This results in greater ease of connection of the component, whether the latter is a passive component, such as a resistance, an inductance, a capacitance, a diode, or any other electrical or electronic component.

The supporting and fixing part according to the invention facilitates, for example, the connection of an electrical or electronic disturbance-reducing component to a supply cable.

Among the advantages of the supporting and fixing part according to the invention, small overall dimensions should be mentioned. The claws make it possible to bare the electric wire so as to ensure perfect electrical continuity with the component.

Other advantages of the invention will become apparent on reading the description of a mode of implementation which is illustrated by the drawings.

Figure 1 shows a supporting and fixing part according to the invention, the closing cover being in the open position.

5 Figure 2 shows the supporting and fixing part from figure 1, the closing cover being in an intermediate position between opening and closing.

Figure 3 shows the supporting and fixing part from figure 10 1, the closing cover being in the closed position.

Figure 4 shows a preferred form of embodiment of the supporting and fixing part illustrated by figures 1 to 3, the cover being in the open position from figure 2.

15

Figure 5 shows the supporting and fixing part illustrated by figure 4, the cover being in the closed position from figure 3.

20 A part for supporting and fixing an electrical or electronic component comprises - figures 1 to 5 - a supporting compartment 1, two claws 3A, 3B and a detachable cover 11. The two claws 3A, 3B each bring about engagement and electrical continuity with a pin 9A, 9B on the 25 electrical or electronic component 7 disposed in the supporting compartment 1 which is, for example, a body made of plastic material.

According to the invention, a blade 5 is fixed to the 30 detachable or pivoting closing cover 11 so as to sever an electric wire 13 which is in engagement and in electrical continuity with the two claws 3A, 3B.

The two claws 3A, 3B are designed to cut into an insulating 35 sheath 13A surrounding the conductive core 13B of the electric wire 13. In this way, they ensure electrical continuity between the electric wire 13 and the pins 9A, 9B

of the electrical component 7 while at the same time holding the electric wire during the severing operation by the blade 5.

5 The closing cap 11 is detachable. As is illustrated by figures 1 to 5, provision is also made for a closing cover 11 that pivots about a hinge 11A in relation to the supporting compartment 1 between an opening position and a closing position in which the said cover is shut down onto
10 the said supporting compartment 1.

Figures 1 to 3 illustrate the functioning of the supporting and fixing part according to the invention so as to connect the electrical or electronic component 7 in series with the
15 electric wire 13, without severing the latter beforehand. Figure 1: the closing cover 11 is in the open position in relation to the plastic body 1. In this position, the electric wire 13 is fixed in each of the two claws 3A, 3B. Figure 2: the closing cover 11 is displaced in a pivoting
20 movement about the hinge 11A in relation to the body 1 made of plastic material, so as to bring the blade 5 progressively closer to the electric wire 13. Figure 3: the closing cover 11 is shut down onto the body 1 made of plastic material in the closing position so as to sever the
25 electric wire 13, which is held by the claws 3A, 3B during the severing operation.

In a preferred mode of implementation, which is illustrated by figures 4 and 5, the part for supporting and fixing the
30 electrical or electronic component comprises a block 15 which is disposed in the body 1 made of plastic material so as to serve as a support for the electric wire 13 during the severing operation by the blade 5. The block 15 comprises two opposed bearing surfaces 15A, 15B and is
35 split so as to allow the blade 5 to pass through, the width of the split corresponding to the thickness of the blade 5 so that the severing operation is clean. Moreover, the

part for supporting and fixing the electrical or electronic component comprises baffles 17A, 17B fixed to the closing cover 11 so as to promote the disengagement of the two strands of the severed electric wire 13 and thus avoid 5 contact between the said strands and the blade 5.

The blade 5 also has a setting angle which, like the constituent material of the said blade 5, depends upon the materials which constitute the electric wire, especially 10 the insulating sheath and the conductive core of the said wire. The blade is preferably manufactured from cold-rolled stainless steel so as to ensure a satisfactory working life.

15 When the closing cover 11 is a pivoting one, the blade 5 possesses a leading angle 5A such that the cutting edge 5B extends in a direction D which intersects the direction A of the hinge 11A for pivoting in relation to the supporting compartment 1.